



# Maintaining Procurement Principles as Technology Advances

**POSITION PAPER**

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### **Published by NIGP: The Institute for Public Procurement**

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## **MAINTAINING PROCUREMENT PRINCIPLES AS TECHNOLOGY ADVANCES**

*A position paper from NIGP: The Institute for Public Procurement  
on the importance of maintaining principles in our profession and the challenges  
presented by an ever-changing environment*

### **POSITION**

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The growing use of technology is having a positive impact on procurement operations. As technology advances, NIGP: The Institute for Public Procurement believes in the importance of maintaining procurement principles.

NIGP and its members are committed to transparent procurement operations in pursuit of obtaining the best value while maintaining the integrity of public funds. Maintaining principles in procurement practice defines and provides a foundation for the profession, both now and in the future. As advances in technology now permeate procurement activities, it is incumbent upon procurement professionals to understand the potential implications of technology utilized in procurement systems in their organization.

### **PROCUREMENT PRINCIPLES IN A CHANGING PROCUREMENT ENVIRONMENT**

NIGP’s “Guiding Principles establish the fundamental norms, rules, or ethics that represent what is desirable (values) and affirmative for our profession and help us determine the rightfulness or wrongfulness of our actions. Principles are more explicit than values, and are meant to govern action.”<sup>1</sup> It is important for public procurement professionals to keep these principles in mind in today’s changing procurement environment characterized by the increased use of technology for sharing and processing information.

The use of sourcing tools to accomplish tasks such as soliciting, receiving, and evaluating offers increases the speed of procurement transactions while improving transparency. However, as technological advances evolve, public procurement professionals must remain vigilant to how these changes affect their established procurement processes, as well as their stakeholders, including internal and external customers, elected officials, and the public.

While public procurement professionals are responsible for their own actions and conduct, they also have a role in ensuring the conduct of internal stakeholders and their suppliers. Formalization, through procurement policy, of this role may not currently be a consistent

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<sup>1</sup> NIGP Guiding Principles, Values and Guiding Principles of Public Procurement, [www.nigp.org](http://www.nigp.org)

practice across all agencies, but it is a practice commonly seen in organizations with centralized procurement authority. When such policy is in place to formalize public procurement’s role of monitoring principled conduct, it generally empowers procurement with the authority “to ensure procurement is conducted in a manner that is fair, transparent, responsible, and ethical.”<sup>2</sup> The public, including suppliers, are right to expect this conduct in the procurement process. In addition, “procurement should also include an understanding of suppliers’ operations and the procurement professional should offer guidance and support when improvement is necessary or appropriate.”<sup>3</sup>

The effective use of technology will facilitate fair, open, and transparent access to procurement information. However, technology can also enable shortcuts or otherwise remove professional judgment at a particular step, which in the worst case could lead to fraud. The implementation of technology-based procurement and sourcing solutions does not change the underlying laws and policies, but nonetheless can change how a procurement process is conducted. Procurement professionals should examine all such changes to preserve process integrity and to perpetually strengthen basic procurement values. Those values include, but are not limited to, fairness, inclusion, and competition.

## **TECHNOLOGY CHALLENGES**

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Failure to maintain procurement principles can occur in both traditional and technology driven procurement environments. This paper highlights the novel or unrecognized means through which unprincipled behavior may result from technology-based transactions. In this environment, the opportunity exists for the exercise of judgment and discretionary decision-making by the procurement professional. A Universal Public Procurement Certification Council (UPPCC) certified procurement professional can help assess circumstances where flawed or changed system design may enable unprincipled conduct.

### ***e-Procurement Systems***

Technology driven changes in public procurement are commonly in the form of electronic procurement (e-procurement). E-procurement is the business to government purchase and sale of supplies, work, and services through the Internet and other information and networking systems.<sup>4</sup> The initial features of e-procurement were transaction-based services such as bidder notification

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<sup>2</sup> NIGP Position Paper – “Procurement Authority in Public Entities”, June 2014

<sup>3</sup> Principles and Practices, Ethical Procurement, 2012, CIPS and NIGP, <http://principlesandpractices.org/wp-content/uploads/2013/04/Ethical.pdf>

<sup>4</sup> Baily, P. J. H. (2008). *Procurement principles and management*. Harlow, England: Prentice Hall Financial Times. p. 394

and electronic purchase orders. As systems have evolved, they may now include e-bidding, proposal evaluation, bid tabulations, electronic invoicing, and procurement reports.

A well-designed e-procurement implementation can lead to improved efficiency and enhanced competition. However, it is possible that efficiency measures and streamlined workflows may diminish the role of procurement professionals in the conduct of the procurement process through reduced contact with the transaction. For example, a bid system that limits the evaluation of bid criteria may lead to a less than optimal award recommendation. Additionally, when utilizing electronic bidding tools, procurement professionals must safeguard access to the system and its data, including limiting broad access to the agency's information technology staff.

Manual processes, with discrete controls, have given way to the use of on-line tools where the transfer of information, including bid submittals, occurs electronically. Procurement transactions, once controlled entirely within the procurement office, have shifted as procurement offices increasingly rely on an internal information technology department or a private third party host. This dependency opens the possibility of compromising procurement principles and requirements, unless system-driven processes are defined and implemented in coordination with procurement professionals.

Procurement processes must ensure the integrity of the sealed bid process is maintained. For example, consider receiving an electronic bid from a supplier; the system must have sufficient controls in place to ensure that the bid is on time, secure, and adheres to all applicable state, provincial and local policies and procedures. A trained professional should examine the technology to make sure those controls are in place and ensure that technology does not outpace "the scope of our ethical norms, creating unanticipated problems and policy vacuums."<sup>5</sup> System workflows must be complemented with policies and procedures that guide proper implementation by the persons using the system and provide context for the underlying process.

Reliance on electronic procurement systems may disengage procurement professionals from procurement process stakeholders. This may be due to poor system design or the incompatibility of the solution's assessment rubric with the stakeholder's desired approach. Consider, for example, a procurement system that does not provide adequate analysis capabilities of non-cost factors important to stakeholders in determining an award decision. This may lead to a disparity between the scoring value of these factors relative to the desires of stakeholders.

Each implemented technology change needs to be vetted against the entity's existing procurement policies and procedures. Procedures may need to be adjusted to align with or

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<sup>5</sup> Hilary Mullen, David Sanford Horner, Ethical Problems for e-Government: An Evaluative Framework, Electronic Journal of e-Government, Volume 2, Issue 3 2004, page 188



supplement functionalities of the newly implemented solution in order to maintain appropriate practices. For example, an entity has a written procedure for evaluating a bidder's references as part of an evaluation, but the new procurement system does not have a method for doing this. The entity will need to adjust the procedure for evaluating references consistent with the capabilities of the technology being used.

Caution must also be exercised to ensure that the implementation of technology does not result in reduced responsiveness to stakeholders (suppliers, elected officials, program offices). The procurement professional would, for example, need to ensure that an electronic bid notification system has the ability to verify whether an e-mail was delivered to an existing account or prevents a supplier from updating its account. Further, the procurement professional should be well versed on the stakeholder view and functionality of any new procurement technology systems.

### ***Implications for Suppliers***

The increased use of technology allows business improvements relative to the exchange of information, but the use of technology may also present operational challenges for small businesses that are compelled to change the way they conduct business with the government entity. Some businesses, particularly small ones, may need assistance using advanced or complicated systems to search for or respond to public bidding opportunities. In addition, consideration should be given to the necessity of providing accommodation for businesses located in geographical areas that still do not have access to high speed internet. Imagine the dilemma resulting from technological enhancements that could be accessed by the majority of the supplier pool, but not all, thus impacting the ability of some suppliers to participate in the competitive process for public contracts.

Prior to a technological change, a full assessment of the supplier pool is advisable to understand the likely impacts of the change and identify transitional resources that facilitate undiminished participation in the procurement process. Many state, province and local government entities provide training and outreach programs for small and disadvantaged businesses to help overcome technology-based challenges. Some public procurement departments provide training and, in some cases, offer on-site computers for suppliers use for registering, searching, and downloading solicitations. This being said, there should also be an expectation of suppliers that they will eventually "graduate" to a point where extraordinary technology assistance is not needed.

### ***Social Media***

The use of social media has been touted as a “great way for government to be collaborative, transparent, and participatory.”<sup>6</sup> Reliance on social media as the primary, or only, media for announcing business opportunities can endanger fair and open competition. Care must be exercised by public procurement professionals to ensure that information is provided to all interested parties in a consistent manner, regardless of the communication outlet used. This can be done by simultaneously posting the information in all media identified for procurement communications.

Care must further be exercised to ensure that all communications distributed through social media are appropriate and do not compromise the integrity of the procurement process by sharing information not otherwise publicly available. Under no circumstances should descriptions or comments about confidential steps in a procurement process be posted in a social media account. It is important to remember that social media is, as a rule, visible to all. Posting of business opportunities should be consistent across all technology platforms

## **SUSTAINING PROCESS INTEGRITY**

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It is the responsibility of the procurement professional to conduct procurement processes in a secure environment. This means ensuring systems have redundancy and the ability to handle the unexpected such as an e-procurement site going down or power outages. In addition, the procurement professional must take steps to address cyber security and for preventing unauthorized access to confidential bid information. All process stakeholders must have full confidence that the integrity of the procurement process is maintained. Understanding potential e-procurement issues may help resolve competing interests between procurement professionals and IT system suppliers. Procurement systems (procure-to-pay) are often implemented in an environment in which private IT companies work on-site in close proximity to procurement professionals that use and administer the system. This may result in a company having inside information about on-going procurements, thereby requiring that these companies uphold the public entity’s standards of confidentiality and integrity. Because certain private sector technology solution providers hold an edge in terms of knowledge, expertise, and ability to design and implement e-procurement platforms, there is a tendency to enter into long term agreements with e-procurement software providers. Procurement professionals must ensure these agreements sustain the transparency and integrity of the contractual relationship into the future. For these reasons, system user permissions must be controlled and administered by the procurement department.

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<sup>6</sup>Government Ethics and the Use of Social Media, 2011 Office of Government Ethics Conference, Orlando, Florida

Electronic procurement solutions are not the only environments in which procurement professionals must be on guard. Commonly used business communication solutions like Outlook and Gmail are used so comfortably that it is easy to forget the nature and formality of the electronic communications sent using these systems. Public procurement professionals must recognize that e-mails are treated as public record, subject to public disclosure and should be treated with appropriate discretion and professionalism. All public employees involved in the procurement process must avoid sending e-mails that could jeopardize or compromise any step in the procurement process, especially by including information that should remain confidential. “Nonpublic information includes information about a contract or procurement that you gain through your job and that you reasonably should know has not been made available to the public.”<sup>7</sup>

## **CONCLUSION**

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Procurement principles, including integrity, are as fundamental now to public procurement as they have ever been. What changes, however, is our environment, and one of the most pervasive and relentless changes is the evolution of technology. The procurement professional is responsible for anticipating and understanding the effects and implications of technology on our procurement processes and, in turn, on procurement principles. We do so by embracing technology, while proactively managing its application to preserve and strengthen enduring procurement values including fairness, inclusion, and competition.

By taking a proactive, principled approach, public procurement can safely navigate the changes driven by technology. When technology leads to changes in business processes, the procurement team must be actively involved to ensure that procurement values are maintained. Timely communication and training for the supplier community about changing technology are imperative to diminish negative impacts and foster uninterrupted participation in the procurement process.

Technology enables transparency in the entire procurement process, but each step must be tested for accuracy, accessibility, compliance, and consistency with our procurement values. An open and transparent procurement process improves competition and efficiency while obtaining best value and maintaining the integrity of public funds.

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<sup>7</sup> United States Office of Government Ethics, Preventing Conflicts of Interest, [http://www.oge.gov/Education/Education-Resources-for-Ethics-Officials/Resources/Assets-Non-Searchable/Ethics---Procurement-Integrity-\(TXT\)/](http://www.oge.gov/Education/Education-Resources-for-Ethics-Officials/Resources/Assets-Non-Searchable/Ethics---Procurement-Integrity-(TXT)/)